

1 ABSTRACT OF THE DISCLOSURE

2 Plasma enhanced chemical vapor deposition (PECVD) reactors and
3 methods of effecting the same are described. In accordance with a
4 preferred implementation, a reaction chamber includes first and second
5 electrodes operably associated therewith. A single RF power generator
6 is connected to an RF power splitter which splits the RF power and
7 applies the split power to both the first and second electrodes.
8 Preferably, power which is applied to both electrodes is in accordance
9 with a power ratio as between electrodes which is other than a 1:1
10 ratio. In accordance with one preferred aspect, the reaction chamber
11 comprises part of a parallel plate PECVD system. In accordance with
12 another preferred aspect, the reaction chamber comprises part of an
13 inductive coil PECVD system. The power ratio is preferably adjustable
14 and can be varied. One manner of effecting a power ratio adjustment
15 is to vary respective electrode surface areas. Another manner of
16 effecting the adjustment is to provide a power splitter which enables the
17 output power thereof to be varied. PECVD processing methods are
18 described as well.

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